ComEd Exhibit ____

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	)	
	)	
Petition for declaration of service currently	)	
provided under Rate 6L to 3 MW and greater	)	
customers as a competitive service pursuant to	)	Docket No. 02 - 0479
Section 16-113 of the Public Utilities Act and	)	
approval of related tariff amendments.	)	

9/16/02

REVISED
Rebuttal Panel Testimony of

PAUL R. CRUMRINE

Director, Regulatory Strategies & Services
Commonwealth Edison Company

and

DENNIS F. KELTER

Senior Regulatory Specialist, Regulatory Strategies & Services
Commonwealth Edison Company

September 2002

Q. Please state your names and business addresses.

A. My name is Paul Crumrine. My business address is 227 W. Monroe, 9th floor, Chicago, IL 60606.

My name is Dennis Kelter. My business address is also 227 W. Monroe, 9th floor, Chicago, IL 60606.

Q. Did you provide the Direct Panel Testimony of Paul R. Crumrine and Dennis F. Kelter in this docket?

A. Yes, we did.

Q. Have you reviewed the direct testimony of the intervenor witnesses in this docket?

A. Yes, we have.

Q. What is the purpose of your rebuttal testimony?

A. Our rebuttal testimony addresses four principal issues raised by the intervenors' witnesses:

1. The purported lack of services "reasonably equivalent" to the service provided under Rate 6L – Large General Service ("Rate 6L")from sources unaffiliated with Commonwealth Edison Company ("ComEd");
2. The suggestion that customers do, and will in the future, find Rate 6L more attractive than the likely competitive alternatives;
3. The suggestion that Customer Transition Charges ("CTCs") are an insurmountable impediment to competition; and
4. The suggestion that the anecdotal experience of the individual customer witnesses is indicative of a lack of competitive alternatives to Rate 6L.

Q. Please summarize your rebuttal testimony.

A. In our rebuttal testimony, we conclude that:

1. There are "*reasonably equivalent substitute service*[s]" available at "comparable prices" to service under Rate 6L as evidenced by customer selection of those alternatives. The standard that the intervenors seek to *impose* – that ComEd show that unaffiliated Retail Electric Supplier ("RESs") offer services identical to Rate 6L and that all customers presently have available an economically superior alternative to Rate 6L-- is unrealistic, unworkable, and contrary to the language of the Public Utilities Act (the "Act" or the "statute").
2. The potential savings likely available to customers who choose unbundled alternatives over Rate 6L over the next three years make it highly unlikely that approval of ComEd's Petition will lead to the wholesale return of customers to Rate 6L.
3. Changes in market values or distribution and transmission services costs are matched by equal and offsetting changes in the CTC until the CTC becomes zero. As a result, these factors are not an impediment to sustainable competition.
4. The anecdotal experience of the individual customers recounted in the intervenors' testimony are not indicative of a failure of competition generally. Indeed, the fact that some of those customers have opted to take service from a RES unaffiliated with ComEd shows that the offerings of those RESs are comparable, or superior, to Rate 6L.

The Reasonable Availability of "Reasonably Equivalent Substitute Service"

Q. Are you generally aware of the provisions of the Public Utilities Act that pertain to information that must be considered by the Illinois Commerce Commission ("ICC" or the "Commission") in determining whether to grant ComEd's petition in this case?

A. Yes. The relevant passage is contained in Section 16-113 (a) of the Act. It states in part:

> "The Commission shall declare the service to be a competitive service for some identifiable customer segment or group of customers, or some clearly defined geographical area within the electric utility's service area, if the service or a reasonably equivalent substitute service is reasonably available to the customer segment or group or in the defined geographical area at a comparable price from one or more providers other than the electric utility or an affiliate of the electric utility, and the electric utility has lost or there is a reasonable likelihood that the electric utility will lose business for the service to the other provider or providers..." (emphasis added)

Q. A number of witnesses (*e.g.*, Swan, Fults, Chalfant, Stephens, and Bodmer) suggest that the evidence provided in your direct testimony does not establish that "a reasonably equivalent substitute service is reasonably available" to the affected customer segment. Do you agree?

A. No. These witnesses would ask the Commission to ignore the evidence that customers are finding reasonably equivalent service offerings and instead set a threshold that would be impossible to ever meet. The evidence we provided shows that 31% of the customers in the 3 MW and above group have opted to take service from an unaffiliated RES over service under Rate 6L. *See* PRC-DFK Attachments 1 and 4. This evidence clearly establishes that a significant number of customers are finding RES supplied alternatives

to bundled service. Indeed, as Mr. Chalfant observes, this data "... demonstrates that marketers can buy and resell electricity at prices lower than Rate 6L." *See* Direct Testimony of A. Chalfant, p. 17, lines 5-6. The essential, and unrebutted, foundation of ComEd's petition is that 3 MW and greater customers have found, and are finding, alternatives to bundled Rate 6L service that are sufficiently attractive to them to switch.

Q. What conditions do the witnesses suggest would be necessary before the Commission could declare service to Rate 6L customers of 3 MW or greater to be competitive?

A. They ask the Commission to require that RESs provide services to customers that are in all ways "identical" to Rate 6L before such service can be declared competitive. They also suggest that "all" customers must have an economically superior alternative to Rate 6L before the service can be declared to be competitive.

Q. Based on your review of their testimony, what do the intervenors mean when they say that the service from RESs must be "identical" to Rate 6L?

A. When the other parties say "identical," they mean:

1. RES service must contain a fixed, frozen price for the entire bundled service including delivery services that are otherwise provided by ComEd on an unbundled basis under Rate RCDS – Retail Customer Delivery Services ("Rate RCDS").
2. The price for RES service must remain fixed and constant until the end of 2006.
3. RES service must be fully hedged for the customer on all price components.

4. RES service must be as easy to acquire as Rate 6L, i.e., no need to issue an Request for Proposal ("RFP"), no requirement to evaluate bids, no need for analysis, no negotiation, no contract to review.
5. The price offer from the RES must be held open for an unspecified amount of time.
6. RES service must permit "all" customers to have an ability to beat Rate 6L with a competitive offering, regardless of the customer's load shape or existing rate options.
7. RES service must provide the full insurance policy of a price ceiling.

Q. What is your reaction to that standard?

A. In our view, it is entirely unrealistic to expect a RES to provide service under these precise conditions. We also believe that this standard is inconsistent with the requirement that alternatives be shown to provide a "reasonably equivalent substitute service" at a "comparable price." The language of the Act does not impose a requirement for the "reasonably equivalent substitute service" to be "identical" to Rate 6L, and the Commission should reject this view.

Q. Would you please describe the general characteristics of Rate 6L that exist in today's regulatory environment?

A. Rate 6L is a service designed for the former regulatory regime that existed prior to the restructuring of the Illinois electricity markets in late 1997. Rate 6L is applicable to all customers 1 MW or greater, not just those of 3 MW or greater that are the subject of ComEd's petition in this docket. The price structure in Rate 6L does not reflect current market conditions. Rate 6L has been frozen at price levels based on cost of service that existed in 1995 when ComEd provided fully bundled service as a vertically integrated

utility. The 1995 rate level for Rate 6L was averaged for cost of service over a wide range of customers containing two specific subclasses, 1 – 10 MW customers and over 10 MW customers. The rate level contains whatever interclass and intraclass subsidies existed in the Commission's 1995 rate order. Finally, Rate 6L has been frozen at its current level as a transition mechanism by the Act.

Q. What do you conclude from this?

A. Given its origin and structure, it is not surprising, in fact it is predictable that not "all" customers can obtain service offerings from RESs that are "identical" to the prices, terms and conditions of Rate 6L. It is also not surprising that some customers have never left Rate 6L service. As we described in our direct testimony, there are some customers that are completing the term of a specially negotiated contract entered into before the adoption of the Restructuring Act in 1997. For those customers who prefer Rate 6L, they can – if ComEd's petition were granted --choose to remain on it for the duration of the grandfathering period.

Q. Illinois Industrial Energy Consumers ("IIEC") witness Robert R. Stephens suggested that the ICC should look to actual RES contracts with customers to evaluate the availability of reasonably equivalent services at comparable prices. (p. 5). Do you agree with his suggestion?

A. No.

Q. Why not?

A. First of all, because ComEd does not have, nor should it have, access to such contracts. We imagine that if we asked some of Mr. Stephens' clients to publicly reveal the contents

of their agreements with RESs that they would vigorously object. It is common practice in the procurement of electricity that customers closely guard the cost of the inputs to their finished products from the eyes of their competitors and view such contracts as confidential business information.

In addition, many witnesses in this case have described the competitive arrangement with a RES as not only confidential between the parties, but the result of competitive bidding and individual negotiations. These individual negotiations result in agreements that are customized for the specific mutual needs of the RES and the customer. Making the contracts public would defeat the entire purpose of confidential negotiations.

Finally, even if the ICC had access to the contracts, it is unclear what actions it could take to review their contents. How would the Commission ever determine that a signed agreement was not sufficiently equivalent or contained sufficiently comparable prices? How would the Commission incorporate value potentially added by the supplier to the customer via other separate, non-commodity products? Would the Commission ever be able to determine anything other than that a contract was signed to the mutual agreement of the two parties that signed it? The answer to this question is obvious. Clearly, the Commission is in no position to evaluate any of these issues, nor should it be. Thus, there is no practical benefit to Mr. Stephens' suggestion to evaluate the contents of contracts entered into between customers and suppliers. His recommendation should be rejected.

Q. What is your opinion on the suggestion that "all" customers of 3 MW or greater should have an acceptable alternative to Rate 6L before it can be declared competitive?

A. Once again, there is no effective way for the Commission to make this determination. The only way to know for sure is that "all" customers have what they view as an acceptable alternative would be if 100% of the customers of 3 MW or greater have actually left Rate 6L service. It is unrealistic to believe that this condition will ever exist. Moreover, the language of the Act calls for loss or imminent loss of customers, it does not require total loss of market share by the utility to occur before the Commission can declare a service to be competitive.

Q. Please summarize your position on the sufficiency of the customer switching data that you presented in your direct testimony to support the Commission's determination that service to Rate 6L customers of 3 MW and greater should be declared competitive?

A. The ComEd customers of 3 MW and greater are a diverse group with varying electricity needs. As we said in our direct testimony, the customer is in the best position to determine what is an equivalent service at a comparable price. Buyers and sellers negotiating terms that are satisfactory to both parties is a characteristic of open markets. Switching statistics are the best reflection of the results of these complex market dynamics. In our view, the Commission should look to the market evidence and let it speak for itself.

Q. What trends have you observed in customer switching since the implementation of choice in 1999?

A. Dr. Haas (pages 16 and 17) and Mr. Chalfant (page 6) suggest that there has been little switching among the customers in the 3 MW and greater segment to unbundled service in the last two years. First, Dr. Haas' chart (on page 17 of his testimony) contains data concerning many customers that are not directly affected by ComEd's petition, which has the effect of masking the switching behavior of the affected customers. Second, although it is clear that many Rate 6L customers switched to unbundled alternatives quickly upon being given that alternative, there has been a steady increase in the number of 3 MW and greater customers choosing to leave Rate 6L for unbundled services over the last several years. Using the data from ComEd's response to Data Request 1-4 propounded by the United States Department of Energy and Attachment PRC-DFK 4, we have charted the number of customers of 3 MW and greater taking bundled service (less those on active special contracts) at the beginning of the past three Applicable Period A time periods. *See* Attachment PRC-DFK R-1. This chart shows a clear, significant, and steady downward trend in the number of customers taking bundled service over time. At the same time, there has been a steady upward trend in customers taking service from an unaffiliated RES during the same time period. *See* Attachment PRC-DFK R-2. This evidence demonstrates that the market is not stagnant and that more customers have been progressively finding alternatives to bundled service that are sufficiently attractive to switch over time.

The Comparative Cost of Service Under Rate 6L and Unbundled Alternatives and the Impact of the CTC

Q. A number of parties have suggested that if ComEd's petition were granted, customers will return in significant numbers to Rate 6L while it is still available. (*See, e.g.*, Direct Testimony of D. Swan, p. 4). *Do you agree?*

A. No. Contrary to the assertions of those witnesses, the economics strongly suggest that customer choice of unbundled delivery services and competitively-supplied electric power and energy will continue to grow over at least the next several years.

Q. On what do you base this conclusion?

A. Using a set of very conservative assumptions, we have compared the cost of electricity to a representative 7 MW manufacturing customer under Rate 6L to the costs the customer would incur taking a combination of unbundled delivery services and competitively-supplied electric power and energy for the first two years that ComEd's petition would be effective, *i.e.* June 2003 through May 2005. This analysis is set forth in Attachment PRC-DFK R-3. Under Rate 6L, the customer's costs are approximately $2.72 million per year or 6.21 cents/kWh. Using current delivery costs and market values for electric power and energy that are conservatively assumed to be 20% higher than the market values applicable during the current Applicable Period A, the customer's total annual cost for the annual period from June 2003 through May 2004 would be approximately $2.43 million, or 5.54 cents/kWh. The customer therefore can save approximately $290,000 in that year, or 0.67 cents/kWh, by opting for unbundled services. Based on this analysis, the customer could likely achieve significant saving by taking unbundled services. In the face of such significant savings, wholesale return to Rate 6L is unlikely.

Q. How does the customer's CTC impact this analysis?

A. Based on the assumptions concerning market values made in Attachment PRC-DFK R-3, the customer's CTC would be 1.492 cents/kWh for the period from June 2003 through May 2004. The fact that the customer would enjoy the potential savings under unbundled services described above with this level of CTC demonstrates that the CTC itself is not an impediment to customers obtaining attractive competitive alternatives to bundled service. In fact, the savings inherent in the mitigation factor are available to the customer so long as the CTC remains a positive value.

Q. What does your analysis show about potential savings available to customers choosing unbundled services in subsequent years?

A. Attachment PRC-DFK R-3 also shows the potential savings available during the annual period from June 2004 through May 2005. For that period, we conservatively increased the market value by an additional 20% for a total increase of 44% from current Applicable Period A market values. This analysis shows that the customer would enjoy savings of approximately $310,000 in that year if it took unbundled services as opposed to service under Rate 6L. The customer's total cost for unbundled service is 5.50 cents/kWh with a CTC of 0.865 cents/kWh before 2005, and 0.802 cents/kWh thereafter because of the statutory increase in the mitigation factor. Again, significant savings are available.

Of particular note, it appears to us that the intervenors' witnesses have failed to consider the savings from the first year (*i.e.*, June 2003 through May 2004) in analyzing the economics of customer choice in subsequent years. Our analysis suggests that the market

value of electric power and energy would have to increase precipitously (approximately 131% from current Period A market values) to above 5.87 cents/kWh in the second year in order for the customer to pay more in taking unbundled services for the first two years during which ComEd's petition would be effective than the customer would pay to take Rate 6L service for the same two-year period. We arrive at this conclusion in the following manner:

Rate 6L – Delivery Services + First Year Savings equals
Break Even Market Value for Year Two

or $6.21¢ - 1.01¢ + 0.67¢ = 5.87¢$

While theoretically possible, the chances for such a market value in year two are rather remote in a market place with ample generation. As a point of reference, the highest Applicable Period A Load Weighted Average Market Value ("LWAMV") for the 6-10 MW customer class since the beginning of customer choice has been approximately 4.5 cents/kWh.

Q. Do the comparative costs of service under Rate 6L and the unbundled alternatives continue to favor unbundled alternatives into the third year?

Yes. The savings from the first two years ($0.67¢ + 0.71¢ = 1.38¢$) could be used to offset an extremely high market value of over 6.5 cents/kWh in the third year and still be equivalent to the economics of bundled service over the entire three year period. Thus, one would have to expect a large near-term market price increase in order to forgo the nearly one million dollars in savings for this customer during the next three years. While this example is only for one customer, we believe the dynamic that it illustrates makes it

unlikely that many customers will forgo significant potential savings and return to bundled service next year if ComEd's petition is granted.

Q. Mr. Fults suggests that customers will not switch to, or remain with, RES service in the face of exposure to potential increases in distribution and transmission costs. (pp. 7-8, 11). How does volatility in distribution and transmission services costs affect the foregoing analysis?

A. Because the customer's CTC declines as distribution and transmission costs increase, the customer would continue to enjoy considerable savings in both future years even if distribution and transmission service costs were to increase significantly along with increases in the market value. Using the same customer data and assumptions as in Attachment PRC-DFK R-3, we repeated those calculations in Attachment PRC-DFK R-4 assuming the worst-case scenarios suggested by Mr. Fults: a 50% increase in distribution charges and a 100% increase in transmission charges. *See* Direct Testimony of Bradley O. Fults, pp. 7-8. In short, because of this "CTC offset," the economics – and the potential savings available to customers choosing unbundled services over Rate 6L -- are the same.

Q. What do you conclude from Attachments PRC-DFK R-3 and R-4?

A. A substantial increase in <u>both</u> the market value of electric power and energy and distribution and transmission services would have to occur in the near-term in order for bundled rates under Rate 6L to be more attractive than unbundled alternatives for many of the customers that are in the 3 MW and greater group. Admittedly, individual customer results may vary from those set forth in Attachments PRC-DFK R-3 and R-4.

However, as in the past, each customer should consider its options next year carefully before readily returning, or staying on, bundled service.

In fact, the results set forth in Attachments PRC-DFK R-3 and R-4 suggest that approval of ComEd's petition could very well lead to increased long-term contracting between customers and RESs. Based on the potential savings available under even the conservative assumptions we have employed, one can foresee RESs offering three-year guaranteed savings contracts or long-term Rate 6L like contacts (with a percentage discount) to customers next year. Dr. Swan states that he plans to request this type of long-term contract next year in his RFP process for his clients. *See* Direct Testimony of D. Swan, pp. 23-24. The result would be that customers will have long-term contracts with the energy charges and CTC being in sync. We believe RESs will be able to respond to this type of request given the relatively low market prices currently present in the marketplace and the expectation for the continuation of these relatively low levels in the presence of abundant capacity in the Midwest. We have just demonstrated that there is plenty of room for market values to increase before open access costs would exceed bundled service rates in the future because of the CTC offset.

The Significance of the Individual Customer Witness Experiences

Q. Have you reviewed the testimony of the witnesses describing the experiences of certain customers in seeking competitive alternatives to Rate 6L within the ComEd service area?

A. Yes, we have reviewed the testimony of Dr. Swan regarding the experience of the federal agencies with whom he works, the testimony of Mr. Walter regarding the experience of

313 the City of Chicago, and the testimony of Messrs. Kelly and Hauk regarding the
314 experiences of Caterpillar and Ford Motor Company respectively.

315 **Q. What do you conclude from the testimony of Messrs. Swan and Walter?**
316 A. This testimony highlights the fact that markets are dynamic in that customers requests
317 various products in their RFPs and suppliers respond as best as they can to meet those
318 requests. Simply put, a learning process occurs, which is most appropriate and expected
319 during the existing transition period. Thus, one should not equate the inability of
320 numerous suppliers to completely comply with the wishes of a few unique customers as a
321 failure of the market place. For example, the City's RFP was issued in July 2000 – less
322 than a year into open access. Thus, it may not be surprising that some suppliers were
323 apprehensive about entering a long-term contract of at least three years in length. Some
324 RESs may also have been unable to address the special environmental components of the
325 RFP. Lastly, many of the City accounts are taking service under Rider GCB –
326 Governmental Consolidated Billing, which has some unique billing characteristics that
327 makes it more difficult for a supplier to provide guaranteed savings. In light of these
328 factors, the City's experience is of relatively little relevance to the experience of most
329 customers in the 3 MW and above group.

330 Likewise, the experience of the federal agencies, who have very unique and stringent
331 contracting requirements, as discussed in Dr. Swan's testimony, says very little about the
332 experience of other customers who have demonstrably been able to locate attractive
333 competitive alternatives to Rate 6L. Also, Dr. Swan compares the success of the Defense
334 Energy Supply Center ("DESC") in obtaining competitive power and energy in other

jurisdictions (*e.g.*, California, Pennsylvania, New Jersey, Maryland, Maine, Texas, and the District of Columbia) in which "...some form of POLR or Standard Offer service is available," and suggests that its failure to do so in Illinois is indicative of some market defect here. *See* Direct Testimony of D. Swan, p. 14. Because none of those jurisdictions appear to have a POLR service along with the equivalent of the Power Purchase Option ("PPO") as in Illinois, comparisons to those states are not especially instructive. In any event, these concerns do not appear to be attributable to the continued availability of Rate 6L.

Q. What do you conclude from the testimony of Messrs. Kelly and Hauk?

A. We feel this testimony reflects the experiences of two individual customers in open access, but it does not reflect the inability of customers in general to find alternatives to bundled service, as shown in our direct testimony. Indeed, the fact that none of the Caterpillar facilities in ComEd's service area are taking service under Rate 6L is evidence of the availability of attractive competitive alternatives. The fact that Caterpillar did not receive what it regarded as a favorable response from the current supplier to one of its facilities, which was the only RES from whom an RFP was solicited, is hardly indicative of an absence of viable competitive alternatives in the marketplace. In fact, the "wait and see" approach recommended by Caterpillar's advisors is hardly surprising given the pendency of this docket.

Likewise, the experience of Ford Motor Company discussed by Mr. Hauk is not an indictment of the viability of the market. Some customers, such as Ford, entered into long-term contracts last year with a fixed market price, but were exposed to changes in

the CTC. These customers entered into fixed-price, multi-year contracts for energy last year based on their own assessment of future market values, which likely would have produced savings in excess of the mitigation factor savings had market values increased. The fact that market values decreased instead and these customers' bills may have increased above Rate 6L rate levels demonstrates only that these contracts turned out, at least temporarily, to be a poor choice. This also shows that even fixed price contracts contain a measure of risk should prices fall rather than increase.

However, this decision was made by customers with the expectation that the RESs' fixed price offering would be more than comparable to Rate 6L, and provide real savings for the customers. Hence, the fact that, at any given point in time, some RES customers may be paying higher rates than they would have paid under Rate 6L is no more relevant than the fact that some RES customers may be paying less. Both cases evidence the existence of at least comparable—or potentially superior—price offerings. Otherwise the customers would not have switched suppliers in the first instance.

Finally, as we previously noted, the prospects for customers such as Caterpillar and Ford to enjoy savings taking unbundled service appear very positive for the next few years. Accordingly, the fact that they currently may find Rate 6L to be potentially attractive does not suggest that they will – contrary to their prior conduct -- opt to return to Rate 6L at any point in the future.

Q. Can you add anything regarding the customers associated with the IIEC and the Chicago Area Customer Coalition ("CACC") that are participating in this proceeding?

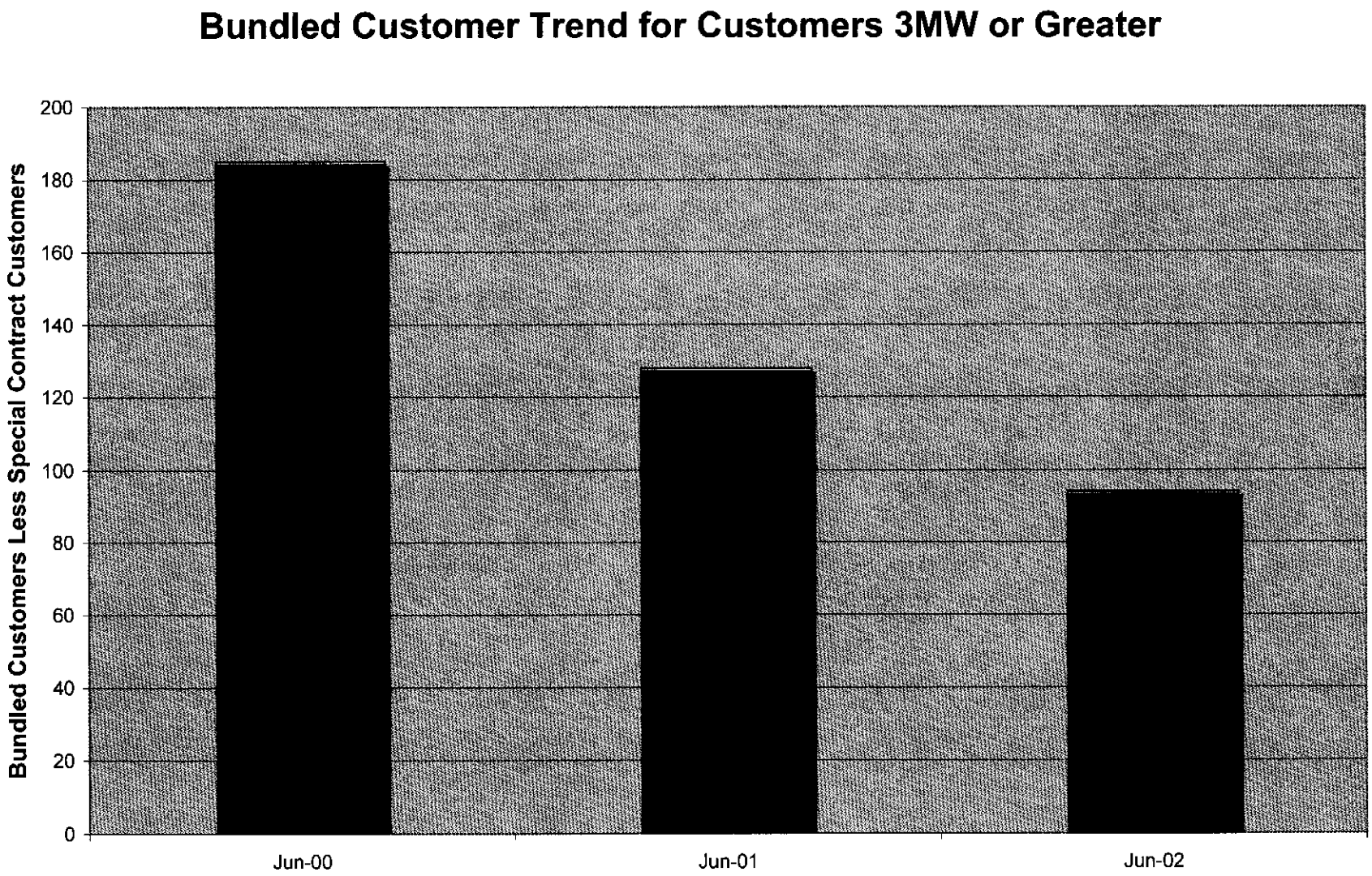
A. Yes. Leaving aside the Metropolitan Chicago Healthcare Council, whose members are not identified and are not directly participating in this proceeding, the firms participating in this proceeding as the IIEC and CACC appear to represent approximately 5% of the 373 customer locations in the 3 MW and above group. Of that 5%, 67% are currently taking service from a non-affiliate RES. The remainder are taking bundled service, with some taking service under special contracts that reflect the competitive options that they previously had available to them. The choices of these customers plainly confirm the availability of attractive alternatives to service under Rate 6L.

Conclusion

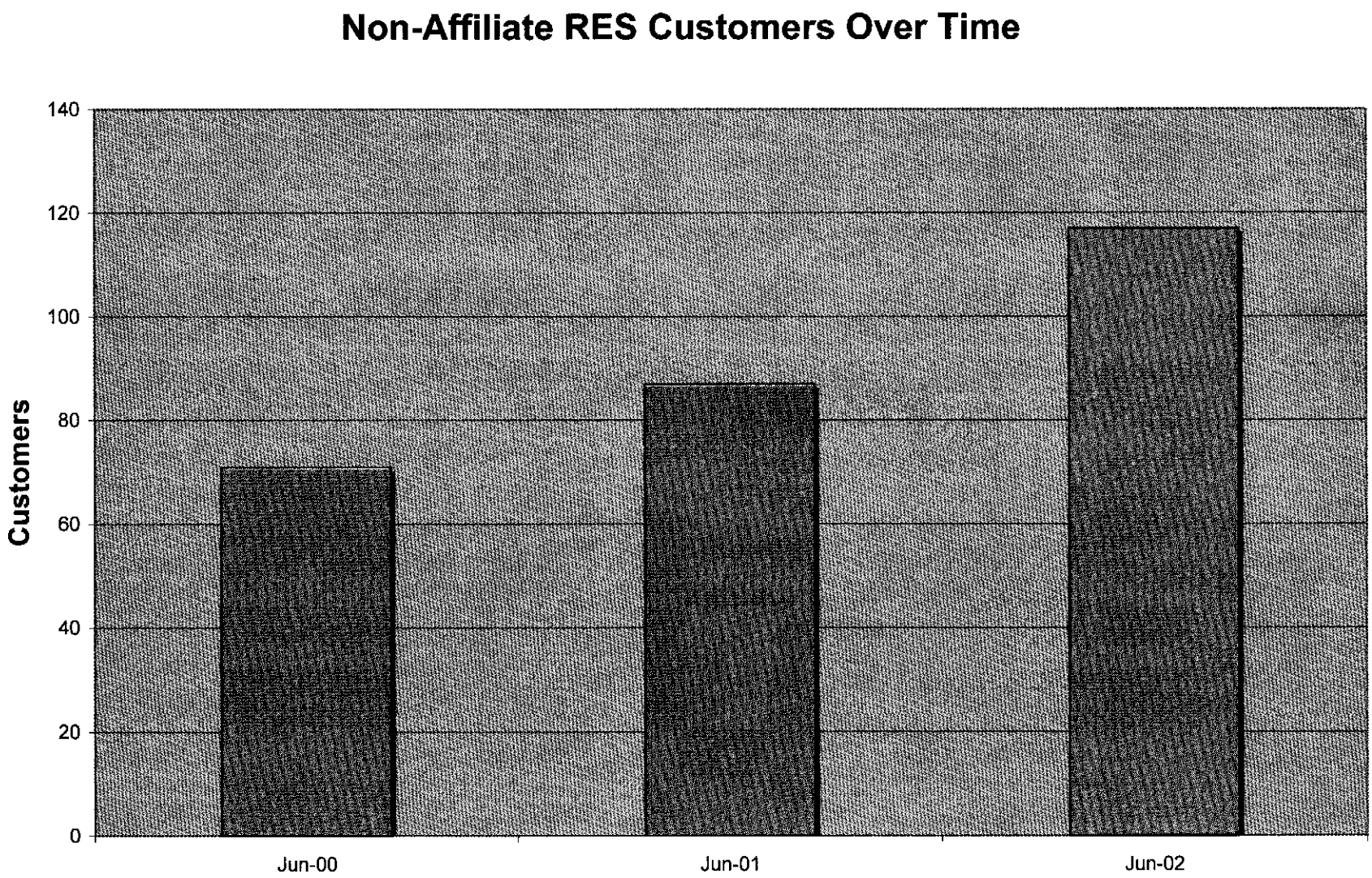
Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

ATTACHMENT PRC-DFK R-1



ATTACHMENT PRC-DFK R-2



ATTACHMENT PRC-DFK R-3

Sample Calculations for a Manufacturing Customer under Current DS and Higher MVEC Charges

(I)

SAMPLE CALCULATION UNDER RATE 6L

	Peak Billing Demand (kW)	On Peak Energy (kWh)	Off Peak Energy (kWh)	Customer Charge	Demand Charge (less than 10 MW)	Peak Energy Charge	Off Peak Energy Charge	Total Bill
Jan	7,013	1,422,238	2,100,195	$246.39	$12.85	$0.05022	$0.02123	$206,375
Feb	6,939	1,258,868	2,134,025	$246.39	$12.85	$0.05022	$0.02123	$197,939
Mar	7,209	1,308,434	2,463,767	$246.39	$12.85	$0.05022	$0.02123	$210,894
Apr	7,239	1,447,675	2,054,777	$246.39	$12.85	$0.05022	$0.02123	$209,599
May	7,313	1,733,994	1,983,784	$246.39	$12.85	$0.05022	$0.02123	$223,416
Jun	7,734	1,769,069	2,124,978	$246.39	$16.41	$0.05022	$0.02123	$261,111
Jul	7,861	1,783,410	2,497,907	$246.39	$16.41	$0.05022	$0.02123	$271,841
Aug	7,870	1,961,791	2,472,856	$246.39	$16.41	$0.05022	$0.02123	$280,418
Sep	7,413	1,544,445	1,876,049	$246.39	$16.41	$0.05022	$0.02123	$239,292
Oct	7,152	1,750,581	1,938,142	$246.39	$12.85	$0.05022	$0.02123	$221,212
Nov	7,502	1,531,461	1,844,760	$246.39	$12.85	$0.05022	$0.02123	$212,717
Dec	7,289	1,116,798	1,694,888	$246.39	$12.85	$0.05022	$0.02123	$185,973
		(A)	(B)					(C)
Totals		18,628,764	25,186,128					$2,720,788

Cost in Cents per kWh
(C)/((A)+(B))*100
6.21

(II)

SAMPLE CALCULATION UNDER DELIVERY SERVICE AND MARKET VALUE ENERGY CHARGES FOR 2003-2004

CTC with January 1, 2003 Mitigation Factor, Current DS Charges and Market Value Energy Charges filed April 11, 2002 Increased 20%

	Peak Demand (kW)	On Peak Energy (kWh)	Off Peak Energy (kWh)	Customer and Metering Charge	Distribution Facilities Charge $/kW	Transmission Service Charge $/kWh	CTC	Market Value On Peak	Market Value Off Peak	Total Bill
Jan	7,144	1,422,238	2,100,195	$379.47	$3.61	$0.00260	$0.01492	$0.03360	$0.02360	$185,235
Feb	7,211	1,258,868	2,134,025	$379.47	$3.61	$0.00260	$0.01492	$0.03360	$0.02360	$178,515
Mar	7,233	1,308,434	2,463,767	$379.47	$3.61	$0.00260	$0.01492	$0.03360	$0.02360	$194,688
Apr	7,329	1,447,675	2,054,777	$379.47	$3.61	$0.00260	$0.01492	$0.03360	$0.02360	$185,334
May	7,365	1,733,994	1,983,784	$379.47	$3.61	$0.00260	$0.01492	$0.03360	$0.02360	$197,182
Jun	7,831	1,769,069	2,124,978	$379.47	$3.61	$0.00260	$0.01492	$0.05432	$0.01982	$235,086
Jul	7,881	1,783,410	2,497,907	$379.47	$3.61	$0.00260	$0.01492	$0.05432	$0.01982	$250,222
Aug	7,988	1,961,791	2,472,856	$379.47	$3.61	$0.00260	$0.01492	$0.05432	$0.01982	$262,486
Sep	7,502	1,544,445	1,876,049	$379.47	$3.61	$0.00260	$0.01492	$0.05432	$0.01982	$208,466
Oct	7,158	1,750,581	1,938,142	$379.47	$3.61	$0.00260	$0.01492	$0.03360	$0.02360	$195,404
Nov	7,524	1,531,461	1,844,760	$379.47	$3.61	$0.00260	$0.01492	$0.03360	$0.02360	$181,687
Dec	7,432	1,116,798	1,694,888	$379.47	$3.61	$0.00260	$0.01492	$0.03360	$0.02360	$153,995
	(A)	(B)	(C)	(D)	(E)	(F)				(G)
Totals	89,598	18,628,764	25,186,128	$4,554						$2,428,301
					$3.61	$0.00260				

Total Cost in Cents per kWh
(G)/[(B)+(C)]*100
5.54

Delivery Service Cost in Cents per kWh
[(D)+(A)*(E)+[(B)+(C)]*(F)]/[(B)+(C)]*100
1.01

(III)

SAMPLE CALCULATION UNDER DELIVERY SERVICE AND MARKET VALUE ENERGY CHARGES FOR 2004-2005

CTCs with Mitigation Factors before and after January 1, 2005, Current DS Charges and Market Value Energy Charges filed April 11, 2002 Increased 44%

	Peak Demand (kW)	On Peak Energy (kWh)	Off Peak Energy (kWh)	Customer and Metering Charge	Distribution Facilities Charge $/kW	Transmission Service Charge $/kWh	CTCs	Market Value On Peak	Market Value Off Peak	Total Bill
Jan	7,144	1,422,238	2,100,195	$379.47	$3.61	$0.00260	$0.00802	$0.04032	$0.02832	$180,401
Feb	7,211	1,258,868	2,134,025	$379.47	$3.61	$0.00260	$0.00802	$0.04032	$0.02832	$173,636
Mar	7,233	1,308,434	2,463,767	$379.47	$3.61	$0.00260	$0.00802	$0.04032	$0.02832	$189,081
Apr	7,329	1,447,675	2,054,777	$379.47	$3.61	$0.00260	$0.00802	$0.04032	$0.02832	$180,594
May	7,365	1,733,994	1,983,784	$379.47	$3.61	$0.00260	$0.00802	$0.04032	$0.02832	$192,545
Jun	7,831	1,769,069	2,124,978	$379.47	$3.61	$0.00260	$0.00865	$0.06519	$0.02379	$238,337
Jul	7,881	1,783,410	2,497,907	$379.47	$3.61	$0.00260	$0.00865	$0.06519	$0.02379	$252,680
Aug	7,988	1,961,791	2,472,856	$379.47	$3.61	$0.00260	$0.00865	$0.06519	$0.02379	$265,823
Sep	7,502	1,544,445	1,876,049	$379.47	$3.61	$0.00260	$0.00865	$0.06519	$0.02379	$211,256
Oct	7,158	1,750,581	1,938,142	$379.47	$3.61	$0.00260	$0.00865	$0.04032	$0.02832	$193,188
Nov	7,524	1,531,461	1,844,760	$379.47	$3.61	$0.00260	$0.00865	$0.04032	$0.02832	$179,517
Dec	7,432	1,116,798	1,694,888	$379.47	$3.61	$0.00260	$0.00865	$0.04032	$0.02832	$151,870
	(A)	(B)	(C)	(D)	(E)	(F)				(G)
Totals	89,598	18,628,764	25,186,128	$4,554						$2,408,928
					$3.61	$0.00260				

Total Cost in Cents per kWh
(G)/[(B)+(C)]*100
5.50

Delivery Service Cost in Cents per kWh
[(D)+(A)*(E)+[(B)+(C)]*(F)]/[(B)+(C)]*100
1.01

ATTACHMENT PRC-DFK R-4

Sample Calculations for a Manufacturing Customer under Higher DS and MVEC Charges

(I)

SAMPLE CALCULATION UNDER RATE 6L

	Peak Billing Demand (kW)	On Peak Energy (kWh)	Off Peak Energy (kWh)	Customer Charge	Demand Charge (less than 10 MW)	Peak Energy Charge	Off Peak Energy Charge	Total Bill
Jan	7,013	1,422,238	2,100,195	$246.39	$12.85	$0.05022	$0.02123	$206,375
Feb	6,939	1,258,868	2,134,025	$246.39	$12.85	$0.05022	$0.02123	$197,939
Mar	7,209	1,308,434	2,463,767	$246.39	$12.85	$0.05022	$0.02123	$210,894
Apr	7,239	1,447,675	2,054,777	$246.39	$12.85	$0.05022	$0.02123	$209,599
May	7,313	1,733,994	1,983,784	$246.39	$12.85	$0.05022	$0.02123	$223,416
Jun	7,734	1,769,069	2,124,978	$246.39	$16.41	$0.05022	$0.02123	$261,111
Jul	7,861	1,783,410	2,497,907	$246.39	$16.41	$0.05022	$0.02123	$271,841
Aug	7,870	1,961,791	2,472,856	$246.39	$16.41	$0.05022	$0.02123	$280,418
Sep	7,413	1,544,445	1,876,049	$246.39	$16.41	$0.05022	$0.02123	$239,292
Oct	7,152	1,750,581	1,938,142	$246.39	$12.85	$0.05022	$0.02123	$221,212
Nov	7,502	1,531,461	1,844,760	$246.39	$12.85	$0.05022	$0.02123	$212,717
Dec	7,289	1,116,798	1,694,888	$246.39	$12.85	$0.05022	$0.02123	$185,973
		(A)	(B)					(C)
Totals		18,628,764	25,186,128					$2,720,788

Cost in Cents per kWh
(C)/[(A)+(B)]*100
6.21

(II)

SAMPLE CALCULATION UNDER DELIVERY SERVICE AND MARKET VALUE ENERGY CHARGES FOR 2003-2004

CTC with January 1, 2003 Mitigation Factor, Higher DS Charges and Market Value Energy Charges filed April 11, 2002 Increased 20%

	Peak Demand (kW)	On Peak Energy (kWh)	Off Peak Energy (kWh)	Customer and Metering Charge	Distribution Facilities Charge $/kW	Transmission Service Charge $/kWh	CTC	Market Value On Peak	Market Value Off Peak	Total Bill
Jan	7,144	1,422,238	2,100,195	$569.21	$5.42	$0.00520	$0.00842	$0.03360	$0.02360	$184,619
Feb	7,211	1,258,868	2,134,025	$569.21	$5.42	$0.00520	$0.00842	$0.03360	$0.02360	$178,524
Mar	7,233	1,308,434	2,463,767	$569.21	$5.42	$0.00520	$0.00842	$0.03360	$0.02360	$193,257
Apr	7,329	1,447,675	2,054,777	$569.21	$5.42	$0.00520	$0.00842	$0.03360	$0.02360	$185,129
May	7,365	1,733,994	1,983,784	$569.21	$5.42	$0.00520	$0.00842	$0.03360	$0.02360	$196,203
Jun	7,831	1,769,069	2,124,978	$569.21	$5.42	$0.00520	$0.00842	$0.05432	$0.01982	$234,264
Jul	7,881	1,783,410	2,497,907	$569.21	$5.42	$0.00520	$0.00842	$0.05432	$0.01982	$247,979
Aug	7,988	1,961,791	2,472,856	$569.21	$5.42	$0.00520	$0.00842	$0.05432	$0.01982	$259,838
Sep	7,502	1,544,445	1,876,049	$569.21	$5.42	$0.00520	$0.00842	$0.05432	$0.01982	$208,895
Oct	7,158	1,750,581	1,938,142	$569.21	$5.42	$0.00520	$0.00842	$0.03360	$0.02360	$194,163
Nov	7,524	1,531,461	1,844,760	$569.21	$5.42	$0.00520	$0.00842	$0.03360	$0.02360	$182,328
Dec	7,432	1,116,798	1,694,888	$569.21	$5.42	$0.00520	$0.00842	$0.03360	$0.02360	$156,672
	(A)	(B)	(C)	(D)	(E)	(F)				(G)
Totals	89,598	18,628,764	25,186,128	$6,831						$2,421,872
					$5.42	$0.00520				

Total Cost in Cents per kWh
(G)/[(B)+(C)]*100
5.53

Delivery Service Cost in Cents per kWh
[(D)+(A)*(E)+[(B)+(C)]*(F)]/[(B)+(C)]*100
1.64

(III)

SAMPLE CALCULATION UNDER DELIVERY SERVICE AND MARKET VALUE ENERGY CHARGES FOR 2004-2005

CTCs with Mitigation Factors before and after January 1, 2005, Higher DS Charges and Market Value Energy Charges filed April 11, 2002 Increased 44%

	Peak Demand (kW)	On Peak Energy (kWh)	Off Peak Energy (kWh)	Customer and Metering Charge	Distribution Facilities Charge $/kW	Transmission Service Charge $/kWh	CTCs	Market Value On Peak	Market Value Off Peak	Total Bill
Jan	7,144	1,422,238	2,100,195	$569.21	$5.42	$0.00520	$0.00152	$0.04032	$0.02832	$179,785
Feb	7,211	1,258,868	2,134,025	$569.21	$5.42	$0.00520	$0.00152	$0.04032	$0.02832	$173,645
Mar	7,233	1,308,434	2,463,767	$569.21	$5.42	$0.00520	$0.00152	$0.04032	$0.02832	$187,651
Apr	7,329	1,447,675	2,054,777	$569.21	$5.42	$0.00520	$0.00152	$0.04032	$0.02832	$180,389
May	7,365	1,733,994	1,983,784	$569.21	$5.42	$0.00520	$0.00152	$0.04032	$0.02832	$191,567
Jun	7,831	1,769,069	2,124,978	$569.21	$5.42	$0.00520	$0.00215	$0.06519	$0.02379	$237,514
Jul	7,881	1,783,410	2,497,907	$569.21	$5.42	$0.00520	$0.00215	$0.06519	$0.02379	$250,438
Aug	7,988	1,961,791	2,472,856	$569.21	$5.42	$0.00520	$0.00215	$0.06519	$0.02379	$263,175
Sep	7,502	1,544,445	1,876,049	$569.21	$5.42	$0.00520	$0.00215	$0.06519	$0.02379	$211,685
Oct	7,158	1,750,581	1,938,142	$569.21	$5.42	$0.00520	$0.00215	$0.04032	$0.02832	$191,947
Nov	7,524	1,531,461	1,844,760	$569.21	$5.42	$0.00520	$0.00215	$0.04032	$0.02832	$180,158
Dec	7,432	1,116,798	1,694,888	$569.21	$5.42	$0.00520	$0.00215	$0.04032	$0.02832	$154,547
	(A)	(B)	(C)	(D)	(E)	(F)				(G)
Totals	89,598	18,628,764	25,186,128	$6,831						$2,402,499
					$5.42	$0.00520				

Total Cost in Cents per kWh
(G)/[(B)+(C)]*100
5.48

Delivery Service Cost in Cents per kWh
[(D)+(A)*(E)+[(B)+(C)]*(F)]/[(B)+(C)]*100
1.64